

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.scopio.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. DAVID J. ROBSON 08/876,322 06/16/1997 7:ROBSON-CON 4900 7590 06/03/2004 EXAMINER THOMAS Q HENRY CINTINS, IVARS C WOODARD EMHARDT NAUGHTON MORIARTY ART UNIT PAPER NUMBER

& MCNETT 111 MONUMENT CIRCLE SUITE 3700 INDIANAPOLIS, IN 46204

1724 DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)   |                     |
|--|--|--|---------------------|
|  | 08/876,322   | ROBSON ET AL.  |                     |
| Office Action Summary  | Examiner   | Art Unit   |                     |
|  | Ivars C. Cintins   | 1724   |                     |
| The MAILING DATE of this commun  |  | heet with the correspondence ad  | dress               |
| Period for Reply   | OD DEDLY IS SET TO EVE   | DE 2 MONTH(S) EDOM   |                     |
| A SHORTENED STATUTORY PERIOD F THE MAILING DATE OF THIS COMMUN  Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this comm If the period for reply specified above is less than thirty (3 If NO period for reply is specified above, the maximum st Failure to reply within the set or extended period for reply Any reply received by the Office later than three months: earned patent term adjustment. See 37 CFR 1.704(b). | ICATION.  s of 37 CFR 1.136(a). In no event, howev nunication.  30) days, a reply within the statutory mininatutory period will apply and will expire S will by statute, cause the application to least the second of the second o | er, may a reply be timely filed  num of thirty (30) days will be considered timely X (6) MONTHS from the mailing date of this or become ABANDONED (35 U.S.C. § 133). | y.<br>ommunication. |
| Status   |  |  |                     |
| 1) Responsive to communication(s) file   | ed on <u>20 May 2004</u> .   |  |                     |
|  | 2b)⊠ This action is non-fina   |  |                     |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |  |                     |
| closed in accordance with the pract  | ice under Ex parte Quayle, 19  | 35 C.D. 11, 453 O.G. 213.  |                     |
| Disposition of Claims  |  |  |                     |
| 4) Claim(s) 1,3-6,8-15,17,20 and 24-3  | 2 is/are pending in the application  | ation.   |                     |
| 4a) Of the above claim(s) is/a   | are withdrawn from considera   | tion.  |                     |
| 5)⊠ Claim(s) <u>26-30 and 32</u> is/are allowe   | d.   |  |                     |
| 6) Claim(s) 1, 3-6, 8-15, 20, 24, 25 and 31 is/are rejected.   |  |  |                     |
| 7) Claim(s) <u>17</u> is/are objected to.  |  |  |                     |
| 8) Claim(s) are subject to restri  | ction and/or election requiren   | епт.   |                     |
| Application Papers   |  |  |                     |
| 9)☐ The specification is objected to by the  | ne Examiner.   |  |                     |
| 10)☐ The drawing(s) filed on is/are  |  |  |                     |
| Applicant may not request that any obje  |  |  |                     |
| Replacement drawing sheet(s) including   |  |  |                     |
| 11) The oath or declaration is objected t  | o by the Examiner. Note the  | attached Office Action of form P   | 10-102.             |
| Priority under 35 U.S.C. § 119   |  |  |                     |
| 12) Acknowledgment is made of a claim  | for foreign priority under 35  | J.S.C. § 119(a)-(d) or (f).  |                     |
| a) ☐ All b) ☐ Some * c) ☐ None of:   |  |  |                     |
| 1. ☐ Certified copies of the priority  |  |  |                     |
| 2. Certified copies of the priority  |  | • • •  | l Stago             |
| <ol> <li>Copies of the certified copies<br/>application from the Internation</li> </ol>  |  |  | Stage               |
| * See the attached detailed Office action  |  | **   |                     |
|  |  |  |                     |
|  |  |  |                     |
| Attachment(s)  |  |  |                     |
| 1) Notice of References Cited (PTO-892)  | · — ,  | nterview Summary (PTO-413) Paper No(s)/Mail Date   |                     |
| Notice of Draftsperson's Patent Drawing Review (     Information Disclosure Statement(s) (PTO-1449 o   | . 10 0.0,  | Notice of Informal Patent Application (PT  | O-152)              |
| Paper No(s)/Mail Date  | 6) 🗌 (   | Other:   |                     |
| U.S. Patent and Trademark Office<br>PTOL-326 (Rev. 1-04)   | Office Action Summary  | Part of Paper No./Mail D   | Date 20040601       |

Application/Control Number: 08/876,322

Art Unit: 1724

This application fails to contain claims numbered "29" and "30." Accordingly, claims 31-34 have been renumbered as claims 29-32, respectively, in accordance with 37 CFR 1.126.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "the oils" (claim 31, line 3) lacks antecedent basis in the claims, since parent claim 26 recites "hydrophobic water-immiscible liquids," not "oils," and is therefore indefinite. Applicant is advised that an amendment changing "oils" to "hydrophobic water-immiscible liquids" in line 3 of claim 31 would overcome this rejection.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-6, 8-15, 20, 24 and 25 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Sohnius (U.S. Patent No. 3,607,741) in view of published European patent application EP 0 213 252 A1. As pointed out in the previous Office Action, Sohnius discloses the claimed invention with the exception of the specific cellulosic material employed. Published European patent application EP 0 213 252 A1 discloses treating a lignocellulosic material in the recited manner, and further teaches (col. 1, lines 6-8) that such treatment increases the dimensional stability of the lignocellulosic material, and also improves its resistance to biological degradation. Since both of these characteristics would obviously be desirable for the

Art Unit: 1724

material of Sohnius, particularly since this reference material will be used in open and rough bodies of water (col. 1, line 21), it would have been obvious to one of ordinary skill in the liquid purification art to substitute the treated lignocellulosic material of published European patent application EP 0 213 252 A1 for the cellulosic material of Sohnius, in order to obtain the advantages disclosed by this secondary reference for the system of the primary reference.

Claims 26-30 are allowed because the references of record do not teach or fairly suggest treating a mixture of the type recited with a material consisting essentially of wood fiber which has been modified by esterification of hydroxyl groups in the lignin of this wood fiber. Claim 32 is allowed because the references of record do not teach or fairly suggest treating a mixture of transformer oil and water with a paper material which has been modified by esterification of hydroxyl groups in the lignin of this paper material. Claim 31 would also be allowed if rewritten or amended to overcome the above rejection under 35 U.S.C. § 112.

Claim 17 is objected to, under 37 CFR § 1.75, as being a substantial duplicate of allowed claim 32. See M.P.E.P. § 706.03(k).

Applicants' arguments filed May 20, 2004 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that comparing the material of Sohnius to this same material treated according to the claimed invention would be difficult because: (1) the material of Sohnius is difficult to prepare; and (2) Applicant is not sure at what point should the wood fiber/paper pulp be treated according to the claimed invention. As to item (1), Applicants should attempt to produce this reference material by combining its components in the amounts disclosed in this reference as best they can. As to item (2), Applicants should modify the starting lignocellulosic plant material (i.e. wood and paper), by esterification of

hydroxyl groups therein, prior to the water repellent treatment, in order to demonstrate that any new and unexpected results obtained are derived from such a modification treatment, and not from any other factors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (571) 272-1156.

The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lvars Cintus

Ivars C. Cintins

Primary Examiner
Art Unit 1724

I. Cintins June 1, 2004